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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,786	01/13/2004	Jeffrey Gabbay	082871-000510US	5452
20350 7590 12/26/2007 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			EXAMINER BOGART, MICHAEL G	
			ART UNIT 3761	PAPER NUMBER
			MAIL DATE 12/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/757,786

Applicant(s)

GABBAY, JEFFREY

Examiner

Michael G. Bogart

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2007 and 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02 October 2007 has been entered.

### ***Terminal Disclaimer***

The terminal disclaimer filed on 26 March 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/756,849 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections – 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Weinberg (US 5,856,248 A) in view of Gabbay (US 6,124,221 A; hereinafter '221), Gabbay (WO 01/81671 A2; hereinafter '671) and Gabbay (WO 01/74166 A1; hereinafter '166).

Regarding claims 1, 5 and 7, Weinberg teaches a disposable paper diaper and method for manufacturing the same, for combating diaper rash, said diaper comprising a plurality of fibers coated with an anti-bacterial water soluble form of copper, which fibers release cupric ions in cationic form when in contact with a fluid (col. 3, lines 37-54).

Weinberg does not disclose expressly a water-insoluble form of copper oxide directly bonded to paper fibers, anti-fungal properties or that the copper oxide is brown.

'221 teaches an article of clothing including undergarments made of natural fibers having a plating that releases an anti-fungal effective amount of at least one oxidant cationic species of copper (abstract, col. 2, lines 15-25, col. 3, lines 34-40, col. 3, line 61-col. 4, line 4, claim 6). '221 further discloses that the plating involves direct bonding of metals or metal oxides to the fibers (col. 2, lines 5-54). '221 does not expressly disclose which specific oxidant cationic species of copper is released, but CuO is referred to in the background.

'671 teaches similar fabrics to those of '221, which involves plating of metal or metal oxides to a natural fiber textile fabric. Specifically, '671 teaches that the ionic form of copper directly bonded to the fibers may include cupric oxide (CuO) or cuprous oxide (Cu<sub>2</sub>O)(page 6, lines 24-29). Cupric oxide and cuprous oxide are inherently water insoluble (see definitions of cuprous oxide and cupric oxide, *Hawley's Condensed Chemical Dictionary*).

'166 teaches antimicrobial textiles that have a water insoluble mixture of cupric oxide (CuO) and cuprous oxide (Cu<sub>2</sub>O) powder (abstract; page 4, lines 14-24; examples 1 and 2; claim

9). Cupric oxide is black in color while cuprous oxide is red. A mixture of cupric oxide and cuprous oxide is dark brown in appearance (see paragraph 4 of applicant's declaration under 37 CFR 1.132, dated 05 March 2007).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to substitute the soluble salts of Weinberg with the directly plated cationic copper methods of '221, '671 and the specific cationic species mixture of '166 in order to provide an art recognized effective antimicrobial compound that avoids the problems associated with indirect bonding via carriers or adhesives (see '671, page 1, last paragraph).

Where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. § 103(a). *Ex Parte Smith*, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007)(citing *KSR v. Teleflex*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Accordingly, Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent persuasive evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. § 103(a). *Ex Parte Smith*, 83 USPQ.2d at 1518-19 (BPAI, 2007)(citing *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396). Accordingly, since the applicant[s] have submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. § 103(a) because it is no more than the predictable use of prior art elements according to their established functions

resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

Regarding claim 8, the limitations concerning how the paper-based product is made from mulch and how the fibers are finely chopped before addition to the mulch are product-by-process limitations. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. MPEP § 2113. The determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art. Weinberg teaches cellulosic fibers which are substantially the same as those made according to the claims (col. 3, line 2).

Regarding claims 2 and 6, Weinberg teaches cellulosic fibers (col. 3, line 2).

Regarding claim 3, see Weinberg, col. 2, line 49-col. 3, line 62.

Regarding claims 4 and 7, '221 teaches a skin contactable underwear liner comprising the antibiotic liner (col. 30, lines 50-53).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.

In the event the examiner is not available, the Examiner's supervisor, Tatyana Zalukaeva may be reached at phone number (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for formal communications. For informal communications, the direct fax to the Examiner is (571) 273-4933.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Bogart  
19 December 2007

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

